

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Frank J. Chu, *et al.*

Serial No.: 10/072,175 Group Art Unit: 2454

Filed: February 7, 2002 Examiner: Joshua Joo

For: SYSTEM ARCHITECTURE Atty. Doc. No.: PT-035
FOR LINKING PACKET-
SWITCHED AND CIRCUIT-
SWITCHED CLIENTS

Honorable Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

COMMUNICATION

S I R:

In response to the February 3, 2009 Office Action in the above-mentioned case, Applicants respectfully request a re-issuance of same and a reset or restart of the previously set period in which Applicants have to reply to Office Action dated February 3, 2009 in view of the following remarks:

REMARKS/ARGUMENTS begin on page 2 of this response.

REMARKS/ARGUMENTS

The Examiner issued an Office Action dated February 3, 2009 to Applicants in reference to the above-mentioned case. However, on the Office Action Summary page in the Status section, the Examiner checked both the 2a) box indicating that "[t]his action is FINAL" as well as the 2b) box indicating that "[t]his action is non-final." Accordingly, Applicants believe the notification of the status of the February 3, 2009 Office Action as indicated by the Examiner is inconsistent and/or conflicting and, therefore, Applicants are unable to determine the actual status of the February 3, 2009 Office Action.

As such, because of the errors including inconsistent statements regarding status of the action, Applicants respectfully request a re-issuance of above-mentioned February 3, 2009 Office Action to correct the error and accurately and consistently state the status of the Office Action. Accordingly, pursuant to chapter 710.06 of the Manual of Patent Examining Procedure, Situations When Reply Period Is Reset or Restarted, Applicants also respectfully request a reset or restart of the previously set period in which Applicants have to reply to Office Action dated February 3, 2009.

This Communication is believed to be filed within one month of the mail date of the Office Action dated February 3, 2009. Thus, Applicants believe they have satisfied the necessary conditions for the United States Patent and Trademark Office to restart the previously set period for reply to the date the correction to errors of Office Action dated February 3, 2009 are made.

CONCLUSION

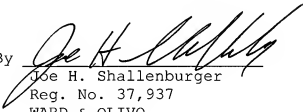
Should any changes to the claims and/or specification be deemed necessary to place the application in condition for allowance, the Examiner is respectfully requested to contact the undersigned to discuss the same.

This Amendment is believed to be timely filed. If a petition for extension of time and/or any other fees are required, the Patent and Trademark Office is specifically authorized to charge such fee to Deposit Account No. 23-0420 in the name of Ward & Olivo.

Respectfully submitted,

Date: 2/10/09

By


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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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630-013

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/072,175

Applicant(s)

CHU ET AL.

Examiner

JOSHUA JOO

Art Unit

2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Detailed Action

1. This Office action is in response to Applicant's communication filed on 11/21/2008.
Claims 1-5 are pending for examination.
Claim 2 is withdrawn.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/21/2008 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 1-3, 5 have been considered but are moot in view of the new ground(s) of rejection. New ground(s) of rejection are necessitated by Applicant's amendment. Applicant also argued that:
 4. (1) Baxley, Kung, or Polcyn alone or in combination do not teach or fairly suggest designating one or more of the first plurality of clients as an active speaker on the packet-switched conferencing server, designating one or more of the second plurality of clients as an active speaker on the circuit-switched conferencing server.
5. In response, Examiner respectfully disagrees that Baxley does not teach or suggest the feature. As indicated in previous Office actions, Baxley teaches of a conferencing server that operates as both a packet-switched conferencing server and a circuit-switched conferencing server, and Kung teaches of connecting two independent conferencing servers. Baxley further teaches of selecting audio inputs from

both GSTN and packet-based endpoints for mixing and outputting (Paragraph 0050). An audio input is associated with an endpoint and by selecting the audio input, the endpoint associated with the selected audio input is considered as an active participant. Thus the selecting an input for output from an endpoint is considered as designating a client as an active speaker.

6. (2) Baxley, Kung, and Polcyn alone or in combination do not teach Applicants' invention which requires a plurality of first clients connected to a plurality of second clients, where the service provider can send and receive audio packets from first and second clients.

7. In response, Examiner respectfully disagrees that Baxley does not teach or suggest the feature. Baxley teaches of a conferencing system that enables GSTN endpoints to communicate with packet-based endpoints in a conference. For instance, the conferencing system receives audio inputs from packet-based endpoints and sends a sum of the inputs to endpoints 30, which are GSTN endpoints (Paragraphs 0051-0052). The conferencing system provides a connection between the packet-based endpoints and GSTN endpoints.

8. (3) Baxley, Kung, and Polcyn alone or in combination do not teach Applicants' invention which requires a connection between the packet-switched conferencing server and the circuit-switched conferencing server.

9. In response, Baxley teaches a conferencing server comprising processes for performing functions of both a packet-switched conferencing server and a circuit-switched conferencing server. Baxley does not explicitly disclose establishing a connection between the packet-switched conferencing server and the circuit-switched conferencing server. However, Kung teaches of establishing a connection between independent conferencing servers for connecting clients connected to respective conferencing servers. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings for the packet-switched server and the circuit-switched server comprised in a server as taught by Baxley to be implemented as independent servers and for an independent server to establish a connection with another independent server for forwarding of audio packets received from a plurality of clients as taught by Kung, which would provide distribution of load of a conferencing server and offload processing power of the conferencing server (col. 31, lines 36-39).

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
12. Claim 3's features of "limiting, by the packet-switched conferencing server, one or more of the first plurality of active speaker clients" and "the packet-switched conferencing server keeps a list of the first plurality of clients who have been designated as an active speaker" are not supported by Applicant's specification. According to claim 3, the one or more of the first plurality of active speaker clients are designated on the circuit-switched conferencing server. Also, according to the specification, the IP MCU limits actively speaking IP-based clients (Page 8, lines 18-23) and the Phone MCU limits the actively speaking phone-based clients (Page 10, lines 1-6). It would appear that the packet-switched conferencing server limits active speakers that are designated by the packet-switched conferencing server. However, the specification does not explicitly or implicitly disclose of a packet-switched conferencing limiting

actives speakers or keeping a list of clients that are designated by the circuit-switched conferencing server.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 4-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

15. Applicant is seeking to patent a computer program product comprising a computer usable medium. According to Applicant's specification, Applicant intends for the computer usable medium to include signals (See specification filed 027/07/2002 page 12, lines 22-24 and specification filed 04/05/2002 page 3, lines 3-7). The claimed invention of a computer program product comprising a signal does not meet one of the four categories of invention and is not statutory. Specifically, a computer program product comprising a signal is not a series of steps or acts and thus is not a process. A computer program product comprising a signal is not a physical article or object and as such is not a machine or manufacture. A computer program product comprising a signal is not a combination of substances and therefore not a composition of matter.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1, 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Baxley et al, US Publication #2004/0085913 (Baxley hereinafter), in view Kung et al, US Patent #6,671,262 (Kung hereinafter), Polcyn, US Patent #6,594,269 (Polcyn hereinafter), and Vega-Garcia et al. US patent #6,839,734 (Vega-Garcia hereinafter).

18. As per claim 1, Baxley teaches substantially the invention as claimed including a method for linking a first plurality of clients connected to a packet-switched conferencing server to a second plurality of clients connected to a circuit-switched conferencing server, the method comprising the steps of:

designating one or more of the first plurality of clients as an active speaker on the packet-switched conferencing server (Paragraphs 0050-0051. Select inputs from packet-based endpoints for receiving and mixing.);

designating one or more of the second plurality of clients as an active speaker on the circuit-switched conferencing server (Paragraph 0050. Select inputs from GSTN endpoints for receiving and mixing.);

receiving a first audio packet from the circuit-switched conferencing server, wherein the first audio packet is a mixture of packets received from each of the second plurality of clients who have been designated as an active speaker by the circuit-switched conferencing server (Paragraph 0050. Audio input is received from GSTN endpoints. Audio inputs are mixed. It is inherent that a process receives audio input for mixing from another process that receives audio input from the GSTN endpoints.);

receiving, by the packet-switched conferencing server, a plurality of audio packets, wherein the plurality of audio packets comprises a second audio packet from each of the first plurality of clients who have been designated as an active speaker by the packet-switched conferencing server (Paragraphs 0050-0051. Audio input is received from packet-based endpoints.);

forwarding, over a connection, the second audio packets to the circuit-switched conferencing server (Paragraphs 0051-0052. Receive audio input from packet endpoints. Output stream is transmitted to the GSTN endpoints. It is inherent that a process receives and sends audio packets to another process for transmission to GSTN endpoints.)

mixing the first audio packet with the second audio packets from the first plurality of clients into a composite packet (Paragraphs 0050; 0054. Audio inputs are mixed. Sum stream represents the mixed input of all selected inputs.); and

forwarding the composite packet to each of the first plurality of clients connected to the packet-switched conferencing server (Paragraph 0052. Stream is directed to the packet-based endpoints.);

whereby the first and second plurality of clients, using varying equipment and protocols, can simultaneously participate in a single audio conference application (Fig. 1; Paragraph 0038. GSTN endpoints are based on circuit-switched network, packet-based endpoints are based on packet-based network.).

19. Baxley teaches substantial features of the claimed invention including a single server comprising both a packet-switch conferencing server and a circuit-switched conferencing server. However, Baxley does not specifically teach of establishing by a packet-switched conferencing server, a connection to a circuit-switched conferencing server; designating the connection as an active speaker on the packet-switched conferencing server, whereby the packet-switched conferencing server is independent from the circuit-switched conferencing server. Baxley also does not specifically disclose of limiting, by the packet-switched conferencing server, one or more of the first plurality of active speaker clients added to the connection, whereby the packet-switched conferencing server keeps a list of the first plurality of clients who have been designated as an active speaker, and the packet-switched conferencing server receiving audio packets using an asynchronous transmission method.

20. Kung teaches a system for conferencing comprising a plurality of conferencing servers, wherein a conferencing server establishes a connection with another conferencing server and uses the connection for forwarding audio packets received from a plurality of clients (col. 31, lines 29-50).

21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched server and the circuit-switched server comprised in a server as taught by Baxley to be implemented as independent servers and for an independent server to establish a connection with another independent server for forwarding of audio packets received from a plurality of clients as taught by Kung. The motivation for the suggested combination is that Kung's teachings would improve Baxley's teachings by providing distribution of load of a server and offload processing power of a server (col. 31, lines 36-39).

22. Polcyn teaches a system for voice conferencing between different networks, wherein a conferencing server receives communications using an asynchronous transmission method (col. 2, lines 32-35; col. 4, lines 21-24, 33-36).

23. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the audio packets received by the packet-switched conferencing as taught by Baxley to receive audio packets using an asynchronous transmission method as taught by Polcyn. The motivation for the suggested combination is that Polcyn's teachings of asynchronous transmission would improve the suggested system by allowing communication without synchronization of an external clock, which would allow a simpler setup of communication between devices. Furthermore, Polcyn's teachings would enable seamless connectivity of multiple types of devices over both synchronous and asynchronous connections (col. 3, lines 26-31).

24. Vega-Garcia teaches a system for conferencing, wherein a server designates one or more of a plurality of clients as an active speaker and limits one or more first plurality of active speaker clients

added to a connection, wherein the server keeps a list of the plurality of clients who have been designated as an active speaker (col. 5, lines 63-col. 7, line 5. Limit number of concurrent speakers. Map or not map data from speaker.).

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched conferencing server as taught by the suggested system to limit one or more of a plurality of active speaker clients added to a connection, whereby a server keeps a list of the plurality of clients who have been designated as an active speaker as taught by Vega-Garcia. The motivation for the suggested combination is that Vega-Garcia's teachings would improve the suggested system by providing a manageable number of speakers that a conference client can hear, both from a perspective of a listening party and system processing capability (col. 5, lines 64-67).

26. As per claim 3, Baxley teaches substantially the invention as claimed including a method for linking a first plurality of clients connected to a circuit-switched conferencing server to a second plurality of clients connected to a packet-switched conferencing server, comprising:

designating one or more of the first plurality of clients as an active speaker on the circuit-switched conferencing server (Paragraph 0050. Select inputs from GSTN endpoints for receiving and mixing.);

designating one or more of the second plurality of clients as an active speaker on the packet-switched conferencing server (Paragraphs 0050-0051. Select inputs from packet-based endpoints for receiving and mixing.);

receiving a first audio packet from the packet-switched conferencing server, wherein the first audio packet is a mixture of packets received from each of the second plurality of clients who have been designated as an active speaker by the packet-switched conferencing server (Paragraphs 0050-0051.

Audio input is received from packet-based endpoints. It is inherent that a process receives audio input for mixing from another process that receives audio input from the packet-based endpoints.);

receiving, by the circuit-switched conferencing server, a plurality of audio packets, wherein the plurality of audio packets comprises a second audio packet from each of the first plurality of clients who have been designated as an active speaker by the circuit-switched conferencing server (Paragraph 0050. Audio input is received from GSTN endpoints.);

mixing the first audio packet and the second audio packet into one combined audio packet (Paragraphs 0050; 0054. Audio inputs are mixed. Sum stream represents the mixed input of all selected inputs.);

forwarding the one combined audio packet to each of the first plurality of clients connected to the circuit-switched conferencing server (Paragraph 0052. Sum stream is directed to the GSTN endpoints.); and

forwarding, over a connection, the second audio packet to the packet-switched conferencing server (Paragraph 0052. Output stream is transmitted to the packet-based endpoints. It is inherent that a process receives and sends audio packets to another process for transmission to packet-based endpoints.);

whereby the first and second plurality of clients, using varying equipment and protocols, can simultaneously participate in a single audio conference application (Fig. 1; Paragraph 0038. GSTN endpoints are based on circuit-switched network, packet-based endpoints are based on packet-based network.).

27. Baxley teaches substantial features of the claimed invention including a single server serving as both a packet-switch conferencing server and a circuit-switched conferencing server. However, Baxley does not teach establishing, by the circuit switched conferencing server, a connection to the packet-switched conferencing server; and designating the connection as an active speaker on the circuit-switched conferencing server, whereby the packet-switched conferencing server is independent from the circuit-

switched conferencing server. Baxley also does not specifically teach of limiting, by the packet-switched conferencing server, one or more of the first plurality of active speaker clients added to the connection and the packet-switched conferencing server receiving audio packets using an asynchronous transmission method, whereby the packet-switched conferencing server keeps a list of the plurality of clients who have been designated as an active speaker.

28. Kung teaches a system for conferencing comprising a plurality of conferencing servers, wherein a conferencing server establishes a connection with another conferencing server and uses the connection for forwarding audio packets received from a plurality of clients (col. 31, lines 29-50).

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched server and the circuit-switched server comprised in a server as taught by Baxley to be implemented as independent servers and for an independent server to establish a connection with another independent server for forwarding of audio packets received from a plurality of clients as taught by Kung. The motivation for the suggested combination is that Kung's teachings would improve Baxley's teachings by providing distribution of load of a server and offload processing power of a server (col. 31, lines 36-39).

30. Polcyn teaches a system for voice conferencing between different networks, wherein a conferencing server receives communications using an asynchronous transmission method (col. 2, lines 32-35; col. 4, lines 21-24, 33-36).

31. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the audio packets received by the packet-switched conferencing as taught by Baxley to receive audio packets using an asynchronous transmission method as taught by Polcyn. The motivation for the suggested combination is that Polcyn's teachings of asynchronous transmission would improve the suggested system by allowing communication without synchronization of an external clock,

which would allow a simpler setup of communication between devices. Furthermore, Polcyn's teachings would enable seamless connectivity of multiple types of devices over both synchronous and asynchronous connections (col. 3, lines 26-31).

32. Vega-Garcia teaches a system for conferencing, wherein a server designates one or more of a plurality of clients as an active speaker and limits one or more first plurality of active speaker clients added to a connection, whereby the server keeps a list of the plurality of clients who have been designated as an active speaker (col. 5, lines 63-col. 7, line 5. Limit number of concurrent speakers. Map or not map data from speaker.).

33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched conferencing server as taught by the suggested system to limit one or more of a plurality of active speaker clients added to a connection, whereby a server keeps a list of the plurality of clients who have been designated as an active speaker as taught by Vega-Garcia. The motivation for the suggested combination is that Vega-Garcia's teachings would improve the suggested system by providing a manageable number of speakers that a conference client can hear, both from a perspective of a listening party and system processing capability (col. 5, lines 64-67).

34. As per claim 4, Baxley teaches substantially the invention as claimed including a computer program product comprising a computer usable medium having control logic stored therein for causing a computer to connect to a first plurality of clients connected to a packet-switched conferencing server to a second plurality of clients connected to a circuit-switched conferencing server, said control logic comprising:

computer readable program code means for causing said computer to designate one or more of the first plurality of clients as an active speaker on said packet-switched conferencing server (Paragraphs 0050-0051. Select inputs from packet-based endpoints for receiving and mixing.);

computer readable program code means for causing said computer to designate one or more of the second plurality of clients as an active speaker on said circuit-switched conferencing server (Paragraph 0050. Select inputs from GSTN endpoints for receiving and mixing.);

computer readable program code means for causing said computer to receive, a first audio packet from the circuit-switched conferencing server, wherein said first audio packet is a mixture of packets received from each of said second plurality of clients who have been designated as an active speaker by said circuit-switched conferencing server (Paragraph 0050. Audio input is received from GSTN endpoints. It is inherent that software process receives audio input for mixing from another software process that receives audio input from the GSTN endpoints.);

computer readable program code means for causing said computer to forward said first audio packet to each of said first plurality of clients connected to said packet-switched conferencing server (Paragraph 0051; 0052. Output stream is transmitted to the packet-based endpoints.);

computer readable program code means for causing said computer to receive, by said packet-switched conferencing server, a plurality of audio packets, wherein said plurality of audio packets comprises a second audio packet from each of said first plurality of clients who have been designated as an active speaker by said packet-switched conferencing server (Paragraphs 0050-0051. Audio input is received from packet-based endpoints.); and

computer readable program code means for causing said computer to forward, over a connection, said second audio packet to said circuit-switched conferencing server (Paragraphs 0051-0052. Receive audio input from packet endpoints. Output stream is transmitted to the GSTN endpoints. It is inherent that a software process receives and sends audio packets to another software process for transmission to GSTN endpoints.);

whereby said first and second plurality of clients, using varying equipment and protocols, can simultaneously participate in a single audio conference application (Fig. 1; Paragraph 0036. GSTN

endpoints are based on packet-based network, packet-based endpoints are based on packet-based network.).

35. Baxley teaches substantial features of the claimed invention including a single server comprising both a packet-switch conferencing server and a circuit-switched conferencing server. However, Baxley does not specifically teach of establishing by a packet-switched conferencing server, a connection to a circuit-switched conferencing server; and designating the connection as an active speaker on the packet-switched conferencing server, whereby the packet-switched conferencing server is independent from the circuit-switched conferencing server. Baxley also does not specifically teach of causing said computer to limit, by said packet-switched conferencing server, one or more of said first plurality of active speaker clients added to said connection; and said packet-switched conferencing server receiving audio packets using an asynchronous transmission method, whereby said packet-switched conferencing server keeps a list of said first plurality of clients who have been designated as an active speaker.

36. Kung teaches a system for conferencing comprising a plurality of conferencing servers, wherein a conferencing server establishes a connection with another conferencing server and uses the connection for forwarding audio packets received from a plurality of clients (col. 31, lines 29-50).

37. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched server and the circuit-switched server comprised in a server as taught by Baxley to be implemented as independent servers and for an independent server to establish a connection with another independent server for forwarding of audio packets received from a plurality of clients as taught by Kung. The motivation for the suggested combination is that Kung's teachings would improve Baxley's teachings by providing distribution of load of a server and offload processing power of a server (col. 31, lines 36-39).

38. Polcyn teaches a system for voice conferencing between different networks, wherein a conferencing server receives communications using an asynchronous transmission method (col. 2, lines 32-35; col. 4, lines 21-24, 33-36).

39. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the audio packets received by the packet-switched conferencing as taught by Baxley to receive audio packets using an asynchronous transmission method as taught by Polcyn. The motivation for the suggested combination is that Polcyn's teachings of asynchronous transmission would improve the suggested system by allowing communication without synchronization of an external clock, which would allow a simpler setup of communication between devices. Furthermore, Polcyn's teachings would enable seamless connectivity of multiple types of devices over both synchronous and asynchronous connections (col. 3, lines 26-31).

40. Vega-Garcia teaches a system for conferencing, wherein a server designates one or more of a plurality of clients as an active speaker and limits one or more first plurality of active speaker clients added to a connection whereby said server keeps a list of said plurality of clients who have been designated as an active speaker (col. 5, lines 63-col. 7, line 5. Limit number of concurrent speakers. Map or not map data from speaker.).

41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched conferencing server as taught by the suggested system to limit one or more of a plurality of active speaker clients added to a connection whereby a server keeps a list of said plurality of clients who have been designated as an active speaker as taught by Vega-Garcia. The motivation for the suggested combination is that Vega-Garcia's teachings would improve the suggested system by providing a manageable number of speakers that a conference client can hear, both from a perspective of a listening party and system processing capability (col. 5, lines 64-67).

42. As per claim 5, Baxley teaches substantially the invention as claimed including a computer program product comprising a computer usable medium having control logic stored therein for causing a computer to connect a first plurality of clients connected to a circuit-switched conferencing server to a second plurality of clients connected to a packet-switched conferencing server, said control logic comprising:

computer readable program code means for causing said computer to designate one or more of the first plurality of clients as an active speaker on said circuit-switched conferencing server (Paragraph 0050. Select inputs from GSTN endpoints for receiving and mixing.);

computer readable program code means for causing said computer to designate one or more of the second plurality of clients as an active speaker on said packet-switched conferencing server (Paragraphs 0050-0051. Select inputs from packet-based endpoints for receiving and mixing.);

computer readable program code means for causing said computer to receive a first audio packet from said packet-switched conferencing server, wherein said first audio packet is a mixture of packets received from each of said second plurality of clients who have been designated as an active speaker by said packet-switched conferencing server (Paragraphs 0050-0051. Audio input is received from packet-based endpoints. It is inherent that software process receives audio input for mixing from another software process that receives audio input from the packet-based endpoints.);

computer readable program code means for causing said computer to receive, by said circuit-switched conferencing server, a plurality of audio packets, wherein said plurality of audio packets comprises a second audio packet from each of said first plurality of clients who have been designated as an active speaker by said packet-switched conferencing server (Paragraph 0050. Audio input is received from GSTN endpoints.);

computer readable program code means for causing said computer to mix said first audio packet and said second audio packet into one combined audio packet (Paragraphs 0050; 0054. Audio inputs are mixed. Sum stream represents the mixed input of all selected inputs.);

computer readable program code means for causing said computer to forward said one combined audio packet to each of said first plurality of clients connected to said circuit-switched conferencing server (Paragraph 0052. Sum stream is directed to the GSTN endpoints.); and

computer readable program code means for causing said computer to forward, over a connection, said second audio packet to said packet-switched conferencing server (Paragraph 0052. Output stream is transmitted to the packet-based endpoints. It is inherent that a software process receives and sends audio packets to another software process for transmission to packet-based endpoints.);

whereby said first and second plurality of clients, using varying equipment and protocols, can simultaneously participate in a single audio conference application (Fig. 1; Paragraph 0038. GSTN endpoints are based on circuit-switched network, packet-based endpoints are based on packet-based network.).

43. Baxley teaches substantial features of the claimed invention including a single server serving as both a packet-switch conferencing server and a circuit-switched conferencing server. However, Baxley does not teach establishing, by said circuit switched conferencing server, a connection to said packet-switched conferencing server; and designating said connection as an active speaker on said circuit-switched conferencing server, whereby said packet-switched conferencing server is independent from said circuit-switched conferencing server. Baxley also does not specifically teach of causing said computer to limit, by said packets-switched conferencing server, one or more of said second plurality of active speaker clients to limit, by said packet-switched conferencing server, one or more of said second plurality of active speaker clients added to the connection; and the packet-switched conferencing server receiving mixture of packets using an asynchronous transmission method whereby said packet-switched

conferencing server keeps a list of said second plurality of clients who have been designated as an active speaker.

44. Kung teaches a system for conferencing comprising a plurality of conferencing servers, wherein a conferencing server establishes a connection with another conferencing server and uses the connection for forwarding audio packets received from a plurality of clients (col. 31, lines 29-50).

45. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched server and the circuit-switched server comprised in a server as taught by Baxley to be implemented as independent servers and for an independent server to establish a connection with another independent server for forwarding of audio packets received from a plurality of clients as taught by Kung. The motivation for the suggested combination is that Kung's teachings would improve Baxley's teachings by providing distribution of load of a server and offload processing power of a server (col. 31, lines 36-39).

46. Polcyn teaches a system for voice conferencing between different networks, wherein a conferencing server receives communications using an asynchronous transmission method (col. 2, lines 32-35; col. 4, lines 21-24, 33-36).

47. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the audio packets received by the packet-switched conferencing as taught by Baxley to receive audio packets using an asynchronous transmission method as taught by Polcyn. The motivation for the suggested combination is that Polcyn's teachings of asynchronous transmission would improve the suggested system by allowing communication without synchronization of an external clock, which would allow a simpler setup of communication between devices. Furthermore, Polcyn's teachings would enable seamless connectivity of multiple types of devices over both synchronous and asynchronous connections (col. 3, lines 26-31).

48. Vega-Garcia teaches a system for conferencing, wherein a server designates one or more of a plurality of clients as an active speaker and limits one or more first plurality of active speaker clients added to a connection whereby said server keeps a list of said plurality of clients who have been designated as an active speaker (col. 5, lines 63-col. 7, line 5. Limit number of concurrent speakers. Map or not map data from speaker.).

49. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the packet-switched conferencing server as taught by the suggested system to limit one or more of a plurality of active speaker clients added to a connection whereby a server keeps a list of said plurality of clients who have been designated as an active speaker as taught by Vega-Garcia. The motivation for the suggested combination is that Vega-Garcia's teachings would improve the suggested system by providing a manageable number of speakers that a conference client can hear, both from a perspective of a listening party and system processing capability (col. 5, lines 64-67).

Conclusion

50. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

51. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Thursday 8AM to 5PM and every other Friday.

52. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

53. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J. J./
Examiner, Art Unit 2454

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2454

Notice of References Cited

Application/Control No.

10/072,175

Applicant(s)/Patent Under
Reexamination
CHU ET AL.

Examiner

JOSHUA JOO

Art Unit

2454

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*	B	US-6,332,153	12-2001	Cohen, Alon	709/204
*	C	US-6,671,262	12-2003	Kung et al.	370/260
*	D	US-6,839,734	01-2005	Vega-Garcia et al.	370/260
*	E	US-2004/0085913	05-2004	Baxley et al.	370/260
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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